

JVC

SERVICE MANUAL

STEREO INTEGRATED AMPLIFIER

MODEL A-X400/A-X400B

Model	Color Version
A-X400	Silver
A-X400B	Black



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Safety Precautions

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.

For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.

When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after reassembling.

5. Leakage current check

(Safety for electrical shock hazard)

After reassembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).

- Alternate check method.

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).

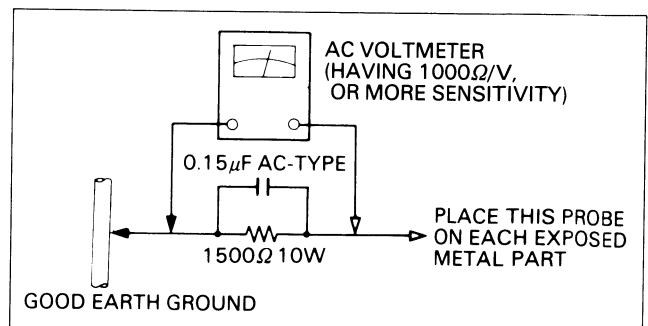


Fig. 1

Service Precautions

1. Before repairing, be sure to discharge the large electrolytic capacitors across a resistor of about 100 ohms/1 watt.

■ When disassembling

1. When replacing a power transistor or IC, be sure to apply silicone grease to the section of a new transistor or IC which is in close contact with the heatsink, then mount it.
2. When removing or stretching wires on the P. C. Board, be sure to restore them to their original routing as far as possible.
3. When connecting a remote switch, insert it from above as shown in Fig. 2. In this case, press it in sufficiently in order to prevent it from floating during operation.

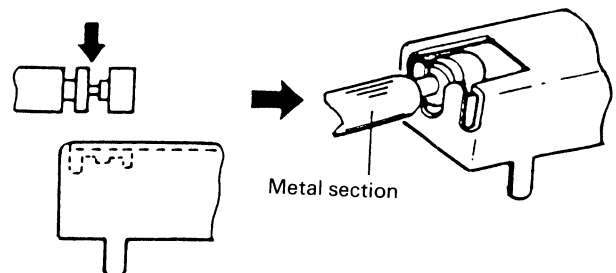


Fig. 2

Note: Set the switch to OFF, then mount or demount it holding the metal section shown above.

1. Specifications

CIRCUITRY : "Dynamic Super-A" power amplifier

ALLOVER CHARACTERISTICS

Output power (AUX IN SP. OUT)

1 kHz : 73 watts RMS per channel min.
(8 ohms, 0.002% total harmonic distortion measured by JVC Audio Analyze System)
80 watts RMS per channel min.
(8 ohms, 0.7% total harmonic distortion)

20 Hz – 20 kHz : 70 watts RMS per channel min.
(both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.)

Total harmonic distortion (AUX IN SP. OUT) : 0.007% (20 Hz – 20 kHz, 8 ohms) at 70 watts

Intermodulation distortion (AUX IN SP. OUT) : 0.005% (60 Hz: 7 kHz = 4 : 1, 8 ohms) at 70 watts

Power band width (AUX IN SP. OUT) : 5 Hz – 40 kHz (IHF, 0.05%, 8 ohms both channels driven)

Frequency characteristic : 5 Hz – 100 kHz +0, –3 dB (8 ohms)

Damping factor : 50 (1 kHz, 8 ohms)

Input terminals

Input sensitivity/impedance (1 kHz)

PHONO (MM) : 2.5 mV/47 kohms

PHONO (MC) : 200 μ V/100 Ω

DAD, TUNER, AUX,

TAPE : 150 mV/40 kohms

Signal-to-noise ratio

PHONO (MM) : 87 dB

PHONO (MC) : 67 dB

DAD, TUNER, AUX,

TAPE : 100 dB

('66 IHF)

PHONO (MM) : 85 dB ('78 IHF, Rec Out)

PHONO (MC) : 77 dB ('78 IHF, Rec Out)

DAD, TUNER, AUX,

TAPE : 77 dB ('78 IHF, Speaker Out)

Tone controls : S.E.A.: center frequencies 63, 160, 400, 1k, 2.5k, 6.3k, 16k
S.E.A.: control range \pm 12 dB

Loudness controls : 100 Hz: +6dB/10 kHz: +4 dB (at VOLUME –30 dB)

EQUALIZER

PHONO overload

capacity (MM) : 100 mV (0.01 % THD)

(MC) : 8 mV (0.01 % THD)

PHONO RIAA deviation

(MM) : \pm 0.3 dB (20 Hz – 20 kHz)

(MC) : \pm 0.5 dB (20 Hz – 20 kHz)

GENERAL

Power source :

Areas	Line Voltage & Frequency	Power consumption
U.S.A. & Canada	AC 120V \sim , 60 Hz	290 watts 380 VA
Europe	AC 220V \sim , 50 Hz	160 watts
U.K. & Australia	AC 240V \sim , 50Hz	160 watts
U.S. Military Market & Other Countries	AC 110/120/220/240V \sim Selectable	190 watts

Dimensions and Weight :

Dimensions (cm)			Weight (kg/lbs)
Height	Width	Depth	
11.7 (4-5/8")	43.5 (17-1/8")	34.7 (13-11/16")	7.8/17.2

Design and specifications subject to change without notice.

2. Removal and Reassembly Procedures

2-(1) Front panel section

1. Remove 6 metal cover screws (2 on each side of the cover and 2 on the rear), and remove the cover.
2. Remove 3 screws from the bottom plate of the front panel.

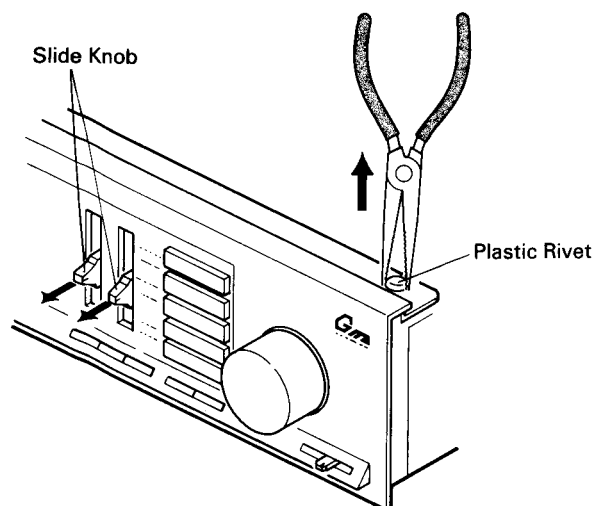


Fig. 3

3. Pull out 3 plastic rivet bushes (2 on the both ends and 1 on the center) on the front panel by using the pinchers (Fig. 3).
4. Pull out 7 slide knobs and pull out the front panel (Fig. 3).
5. Remove the plastic rivet bushes from the P. C. Board and take out the P. C. Board (Fig. 4)

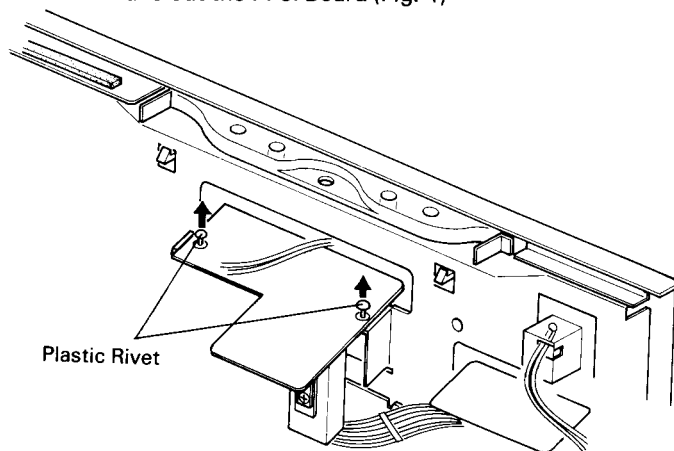


Fig. 4

2-(2) Power transistor section

1. Remove the metal cover (Refer to step 1. above.).
2. Remove 2 screws from each main P. C. Board brackets.
3. Pull out the main P. C. Board in the direction of the arrow shown in Fig. 5, taking care that the board does not contact P. C. Board.

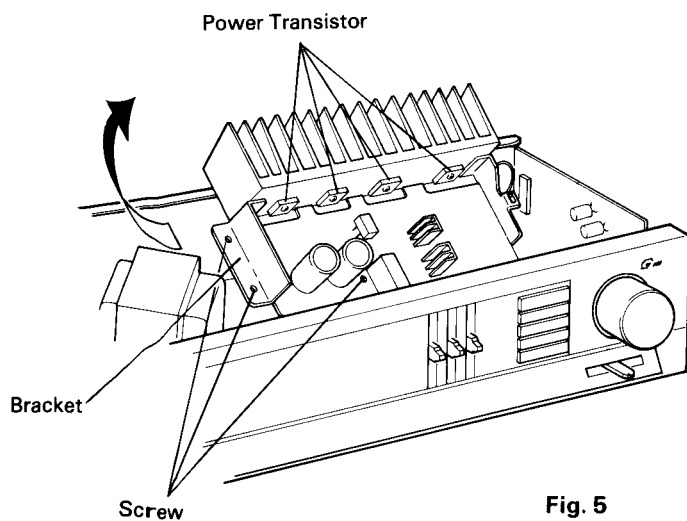


Fig. 5

2-(3) S. E. A. escutcheon section

1. Disengage the upper 3 claws from the front panel and remove the escutcheon from the upper side.

Note: If the claw is removed with excessive force, it may be broken.

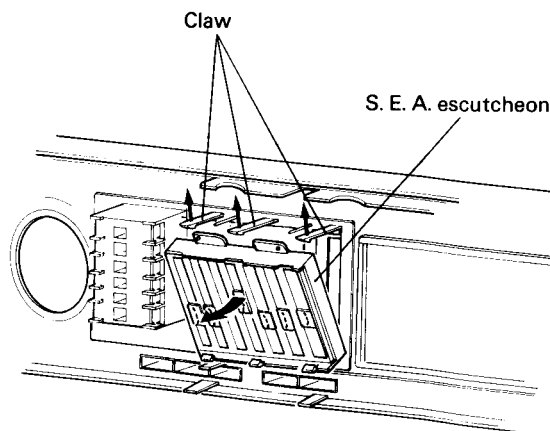


Fig. 6

Note: Reassemble in the reverse order to removal.

3. Adjustment Procedures

3-(1) Power Level Indicator Adjustment

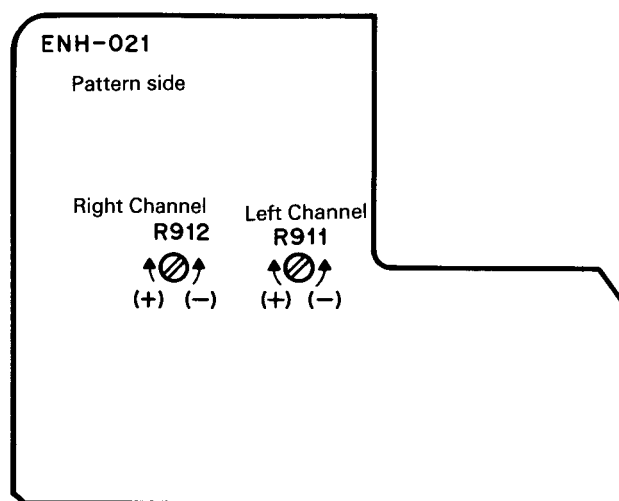


Fig. 7

Power Level Indicator Adjustment

1. Turn the semi-fixed resistors (R911, R912) counterclockwise fully, before switching the power ON.
2. With the output voltage at 14.1V 1 kHz, adjust the indicator so that its -3 dB point lights.
Left channel : R911
Right channel: R912

3-(2) Power Amplifier Idling Current Adjustment

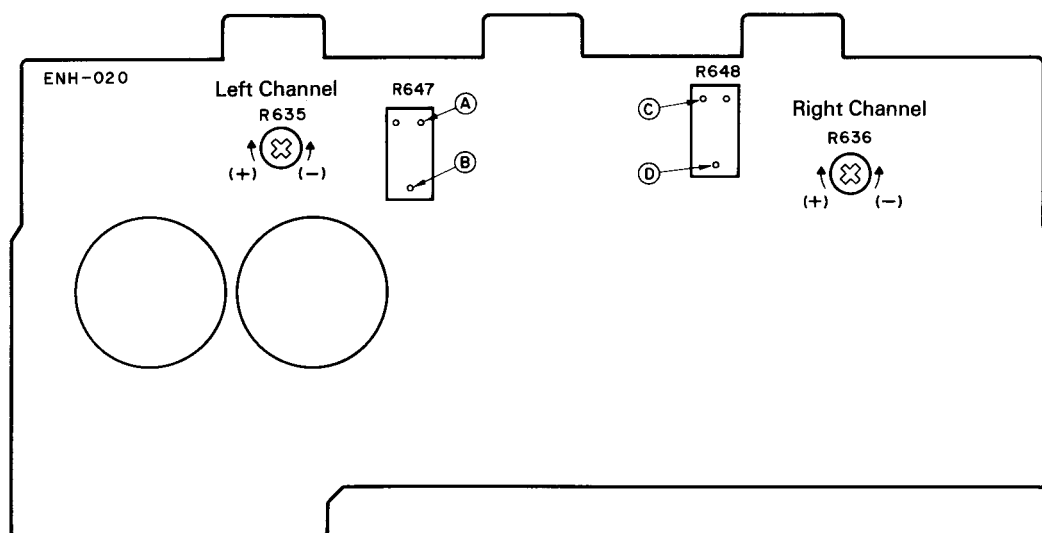


Fig. 8

1. Before turning on the power, turn the semi-fixed resistors (R635 for L channel and R636 for R channel) of the power amplifier circuit board fully counterclockwise.
2. Adjust the semi-fixed resistors (R635 and R636) so that the voltage at the following test points of the power amplifier circuit board is within a range of 5 mV -6 mV after the power is turned on.
Lchannel: Measure the voltage between test point A (emitter of Q617) and output at the test point B.
Rchannel: Measure the voltage between test point C (emitter of Q618) and output at the test point D.
3. Readjust resistors R635 and R636 about 5 minutes after the power is turned on (the heatsink temperature must be sufficiently high) so that the voltage at the test point becomes 11 mV.
Confirm that the voltage does not vary when the heat-sink temperature increases further.
Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of A-X400 or other measuring equipment.

4. Block Diagram

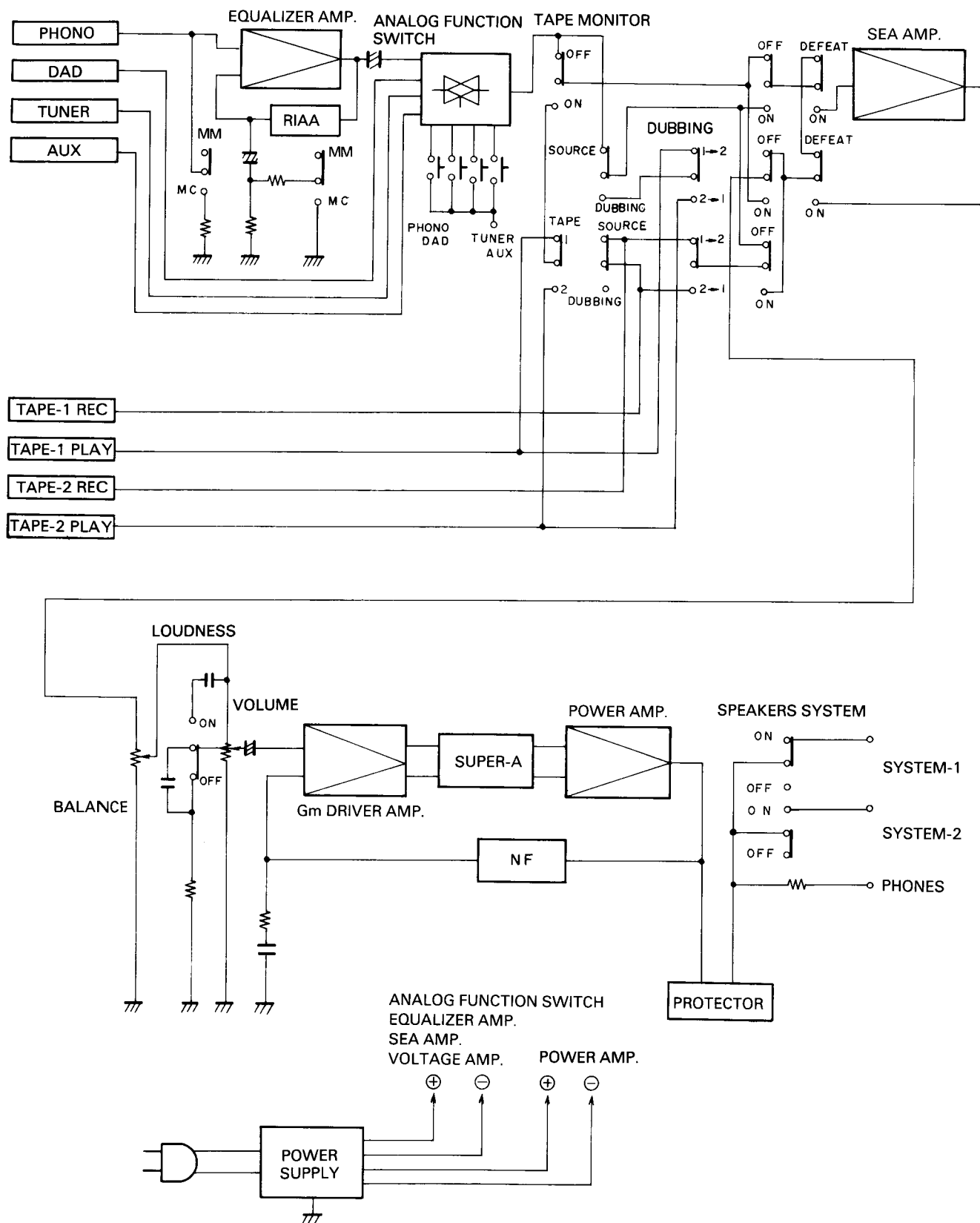
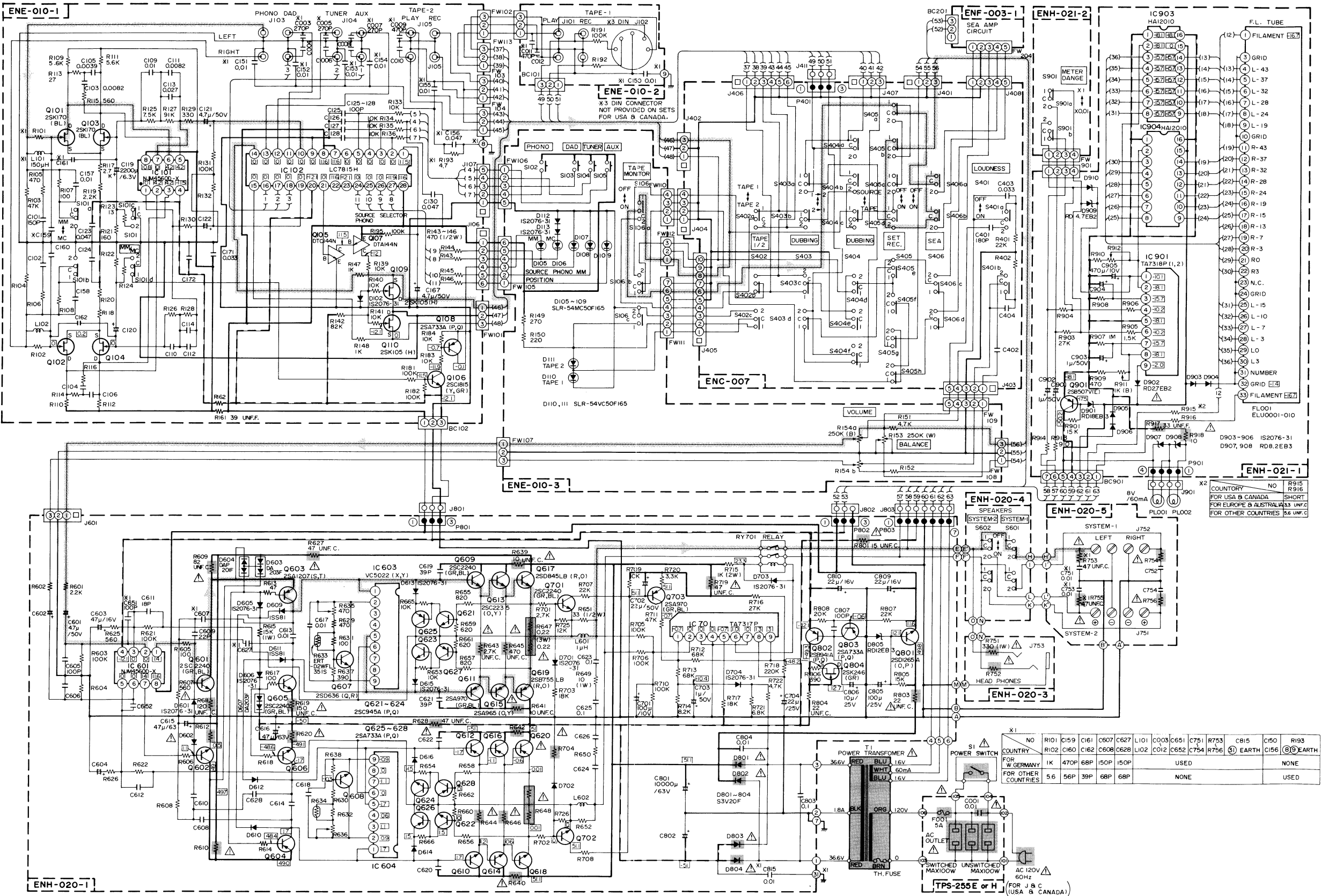
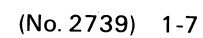


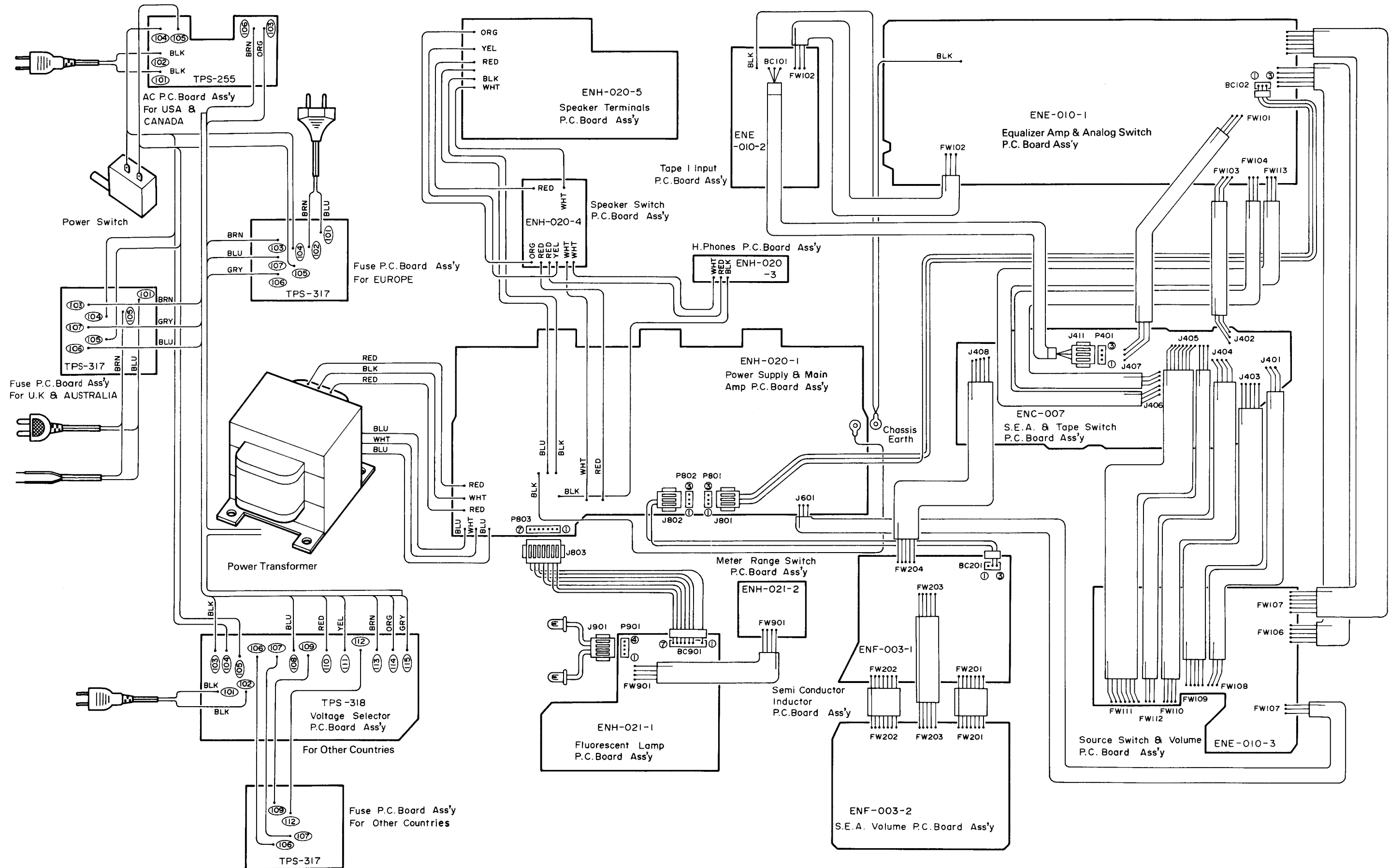
Fig. 9

5. A-X400 Schematic Diagram





6. Wiring Diagram



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1. Main Parts Locations

Front View

Power Push Knob
VXP3108-001 (Silver)
VXP3108-002 (Black)

Push Knob Ass'y
E303300-001 (Silver)
E303300-002 (Black)

Volume Knob
E70143-002 (Silver)
E70143-006 (Black)

Balance Knob
E69406-003 (Silver)
E69406-004 (Black)

Push Knob
E71268-001 (Silver)
E71268-002 (Black)

Top View

Power Transformer
See page 2-4

Heatsink
E300209-014

Power Amp. Unit
ENH-020

FL Meter Unit
ENH-021

Rear View

4P Pin Jack
EMN00 TV-402A

GND Terminal
E70078-001

DIN Socket
E03623-003

Voltage Selector
QSR0085-006U

3P AC Outlets
QMC 0637-004

Power Cord
See Page 2-4

Cord Stopper
See page 2-4

4P Pin Jack
EMN00 TP-403A

E03572-007EM
Speaker Terminal

2. Exploded View and Part Numbers List

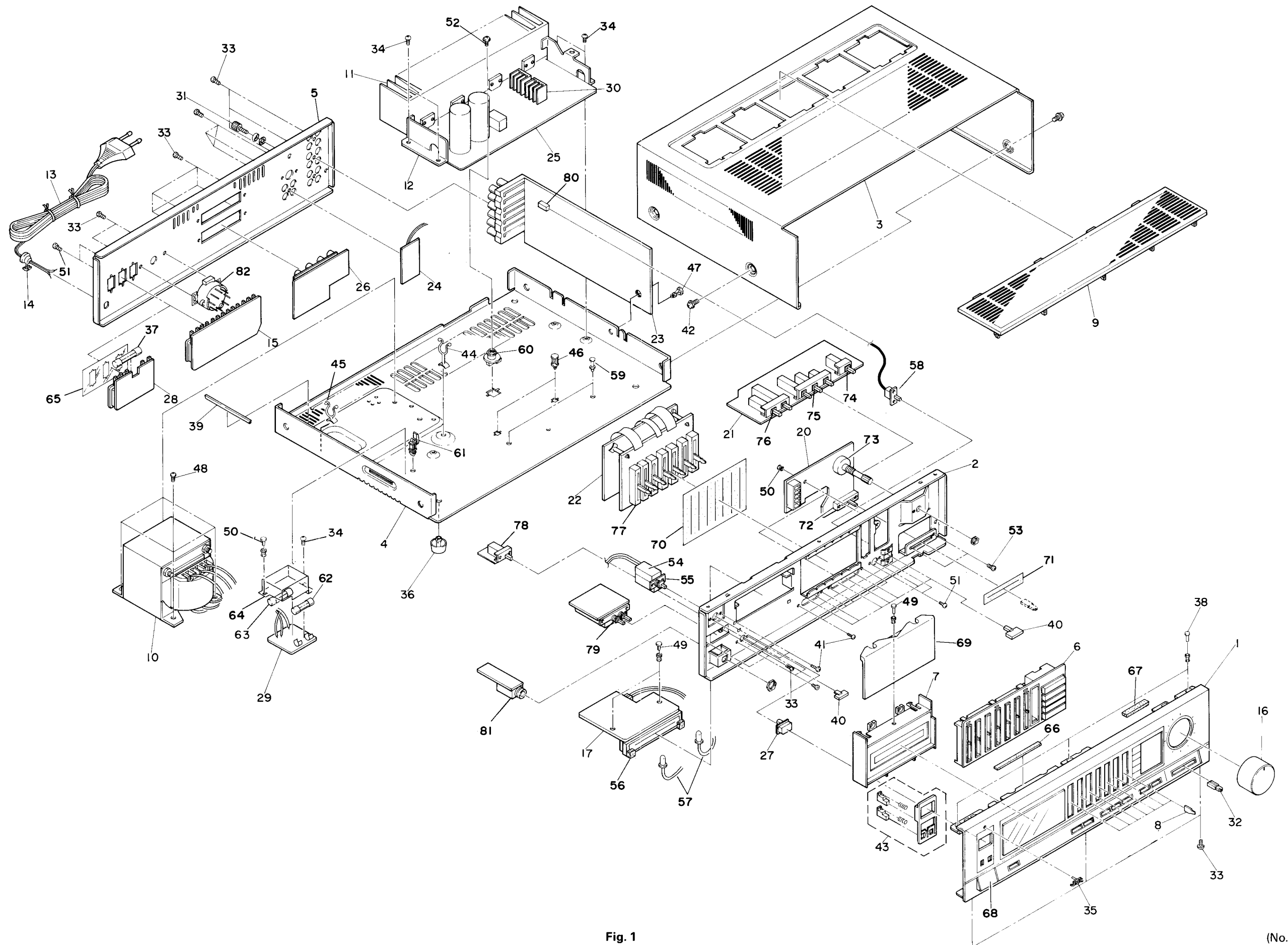


Fig. 1

The Marks for Designated Areas.

J..... U. S. A.
C..... Canada
E..... Europe
G..... West Germany

A..... Australia
P, PG..... U. S. Military Market
BS..... U. K.
U..... Other Countries

No mark indicates all areas.

No.	Part Number	Part Name	Q'ty	Description	Area
1	EFP-AX400E	Front Panel Ass'y	1	(S)	
2	EFP-AX400EB	Front Panel Ass'y	1	(B)	
3	E10980-001	Front Bracket	1		
	E24719-001	Metal Cover	1	(S)	J, C, U, P, PG, G, A
	E24719-002	Metal Cover	1	(B)	J, C, U, P, PG, G, A
4	E24742-001	Metal Cover	1	(S)	E, BS
	E24742-002	Metal Cover	1	(B)	E, BS
5	E10653-006	Chassis Base	1		
	E24127-018	Rear Panel	1	(S)	J, C
	E24127-019	Rear Panel	1	(S)	E, G, A, BS
	E24127-020	Rear Panel	1	(S)	U, P, PG
	E24127-021	Rear Panel	1	(B)	J, C
	E24127-022	Rear Panel	1	(B)	E, G, A, BS
	E24127-023	Rear Panel	1	(B)	U, P, PG
6	E24704-001	SEA Escutcheon	1	(S)	
7	E24704-002	SEA Escutcheon	1	(B)	
	E30303-001SA	FL. Escutcheon	1	(S) with Screen	
	E30303-002SA	FL. Escutcheon	1	(B) with Screen	
8	E71265-001	SEA Knob	7	(S)	
	E71265-002	SEA Knob	7	(B)	
9	E23862-003	Grill	1	(S)	E, BS
	E23862-004	Grill	1	(B)	E, BS
10	ETP1200-05JA	Power Transformer	1		J, C
	ETP1200-05FA	Power Transformer	1		U, P, PG
	ETP1200-05EA	Power Transformer	1		E, G, A
11	ETP1200-05EABS	Power Transformer	1		BS
12	E300209-014	Heatsink	1		
	E302256-003	Bracket (L)	1	Heatsink	
	E302256-004	Bracket (R)	1	Heatsink	
13	QMP1200-200	Power Cord	1		J
	QMP1900-200	Power Cord	1		C
	QMP7600-250	Power Cord	1		U, P, PG
	QMP3900-200	Power Cord	1		E, G
	QMP2560-244	Power Cord	1		A
	QMP9017-008BS	Power Cord	1		BS
14	QHS3876-162	Cord Stopper	1		J, C, U, P, PG, E, G, A
	QHS3876-162BS	Cord Stopper	1		BS
15	TPS318A	Voltage Selector Unit	1		U, P, PG
16	E70143-002	Volume Knob	1	(S)	
	E70143-006	Volume Knob	1	(B)	
17	ENH021A	FL Meter Unit	1		J, C
	ENH021B	FL Meter Unit	1		U, P, PG
	ENH021C	FL Meter Unit	1		E, G, A, BS
18	ENH020-3	Headphone Unit	1		
19	ENH020-4	Speaker Switch Unit	1		
20	ENE010-3	Source Switch and Volume Unit	1		
21	ENC007A	Tape Unit	1		
22	ENF003A	SEA Amp. Unit	1		
23	ENE010A	EQ Amp. Unit	1		
24	ENE010-2	Input Unit	1	Tape-1	

△ : Safety Parts

(S) and (B) in the Description column indicate silver and black versions.

No.	Part Number	Part Name	Q'ty	Description	Area
25	ENH-020A	Power Amp. Unit	1	(S)	J, C, U, P, PG, E, A, BS
	ENH-020B	Power Amp. Unit	1	(S)	G
	ENH-020C	Power Amp. Unit	1	(B)	J, C, U, P, PG, E, A, BS
	ENH-020D	Power Amp. Unit	1	(B)	G
26	ENH-020-5	Speaker Terminal Unit	1		
27	VXP3108-001	Power Push Knob	1	(S)	
	VXP3108-002	Power Push Knob	1	(B)	
28	TPS-255H	AC Socket Unit	1		J, C
29	TPS-317A	Fuse Unit	1		U, P, PG
	TPS-317L	Fuse Unit	1		E, G, A
30	TPS-317MBS	Fuse Unit	1		BS
	E70945-H40B	Heatsink	2		
31	E70078-001	GND Terminal	1		
32	E69406-003	Balance Knob	1	(S)	
	E69406-004	Balance Knob	1	(B)	
33	SBSB3008N	Tapping Screw	14		Front Bracket, Rear Panel
34	E65119-001	Special Screw	12		
35	E70913-002	JVC Mark	1	(S)	
	E70913-001	JVC Mark	1	(B)	
36	E301258-002	Foot	4		
37	QMF61U1-5RO	Fuse	1		J, C
38	E48729-009	Plastic Rivet	3	Upper	
39	E65778-002	Spacer	1		
40	E71268-001	Push Knob	8	(S)	
	E71268-002	Push Knob	8	(B)	
41	E65119-001	Special Screw	2		SEA Switch
	E65119-001	Special Screw	2		Speaker
	E65119-001	Special Screw	1		ME, Range
42	E61660-001	Special Screw	4	(S), Cover Side	
	E61660-004	Special Screw	4	(B), Cover Side	
43	E303287-001	Push Knob Ass'y	1	(S)	
	E303287-002	Push Knob Ass'y	1	(B)	
44	QHW1115-001	Wire Clamp	1		
45	QHW2052-001	Wire Clamp	1		J, C
46	E69383-002	Fastener	1		
47	E303216-001	Fastener	2		
48	E65389-002	Ass'y Screw	4		Power Transformer
49	E48729-001	Plastic Rivet	1		
50	E48729-008	Plastic Rivet	2		
51	SDSB3008M	Tapping Screw	2		
52	GBSB3008N	Screw	1		
53	SPST2604Z	Screw	2		
54	E71004-001	Switch Cover	1		Power Switch
55	QSP1106-004	Power Switch	1		
56	EXO010005H90S	Felt Spacer	2		
57	E03872-020	Lamp Ass'y	2		
58	QSH1907-004	Flex Push Switch	1		
59	E71344-001	Fastener	2		
60	E49946-002	Fastener	1		
61	E34455-001	Fastener	1		U, P, PG, E, G, A
62	QMF51A2-5ROS	Fuse	1	F001	U, P, PG
	QMF51A-2R5L	Fuse	1	F001	U, P, PG, E, G, A
	QMF51A-2R5LBS	Fuse	1	F001	BS
63	QMF51A2-2R5L	Fuse	1	F002	U, P, PG
64	E303419-001	Protector Cover	1		BS, E, A
65	E69589-001	Spacer	1		
66	EXO100005N20S	Felt Spacer	1		
67	EXO040007N50S	Felt Spacer	1		
68	E71448-007	H. P. ESC Ass'y	1	(S)	
	E71448-008	H. P. ESC Ass'y	1	(B)	

△ : Safety Parts

(S) and (B) in the Description column indicate silver and black versions.

No.	Part Number	Part Name	Q'ty	Description	Area
69	E303305-001	Scale	1		
70	E303459-001	Felt Spacer	1		
71	E71454-001	Felt Spacer	1		
72	QVZ5205-001	Variable	1		
73	QVN9A3B-5F5	Variable	1		
74	QST4101-E12	Push Switch	1		
75	QST4361-E04	Push Switch	1		
76	QST4261-E04	Push Switch	1		
77	QVZ5010-106	Variable	7		
78	QST2101-E08	Push Switch	1		
79	QST4241-E06	Push Switch	1		
80	QSS4201-504	Push Switch	1		
81	QMS6302-125	Headphone Jack	1	(S)	
	QMS6302-128	Headphone Jack	1	(B)	
82	QSR0085-006U	Voltage Selector	1		U

⚠ : Safety Parts
(S) and (B) in the Description column indicate silver and black versions.

3. Printed Circuit Board Ass'y and Parts List

3-(1) ENH-020 □ Main Amp. P. C. Board Ass'y
Note: ENH-020 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada Europe, Australia, U.K., U.S. Military Market and Other Countries	ENH-020 A, C
West Germany	ENH-020 B, D

Note (2)

ENH-020 A and B are provided for silver version models.
ENH-020 C and D are provided for silver version models.

Note (3)

The symbols (赤、黒、白………… etc.) on P.C. Board surface are factory process only.

Note (4)

The column marked with □ indicates the area
No mark………… All areas
G………… West Germany

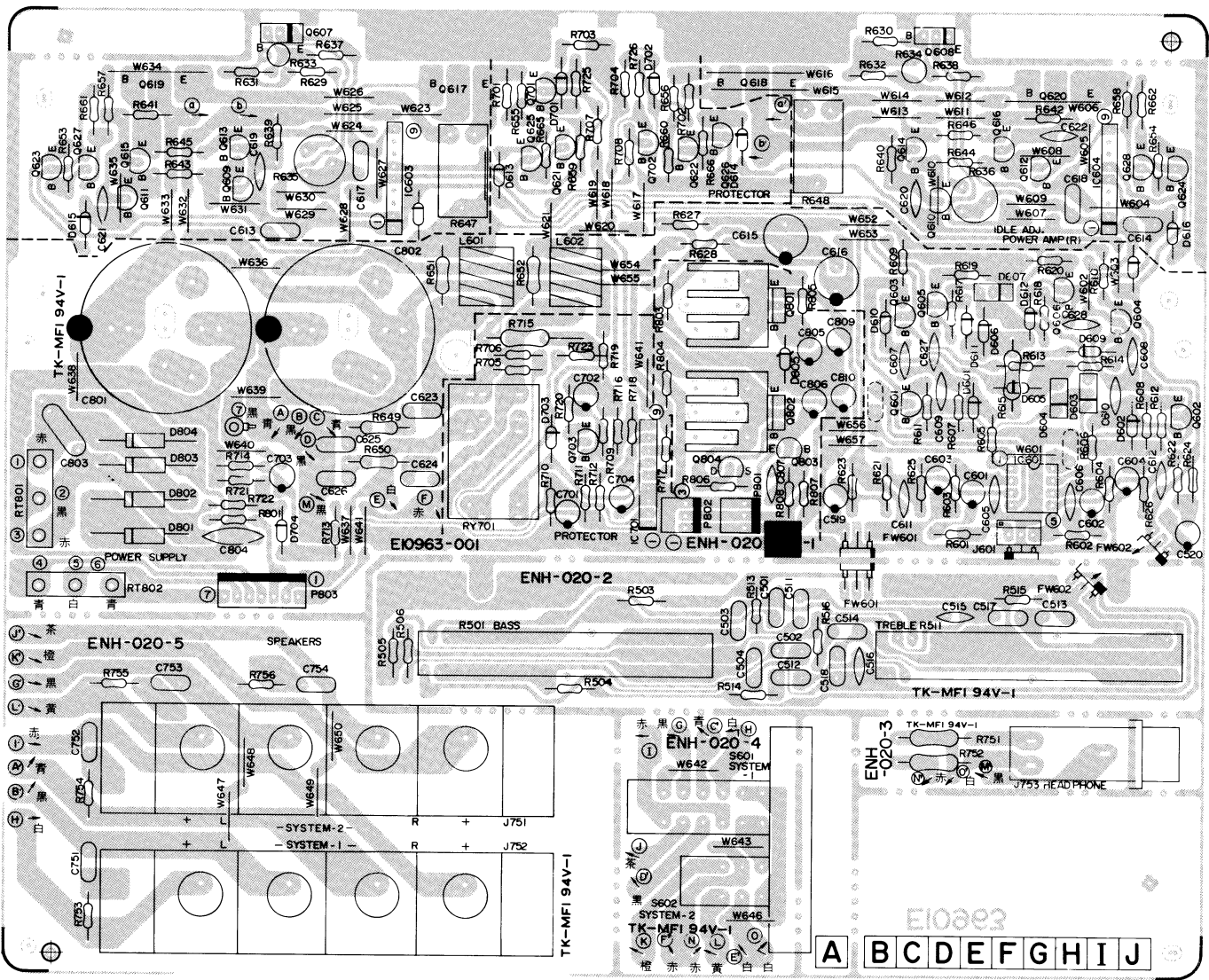


Fig. 2

Capacitors

Item No.	Part Number	Description	□
C601	QETC1HM-475Z	Electro 4.7 μ 50V	
C602	QETC1HM-475Z	Electro 4.7 μ 50V	
C603	QETC1CM-476Z	Electro 47 μ 16V	
C604	QETC1CM-476Z	Electro 47 μ 16V	
C605	QCS31HJ-101Z	Ceramic 100P 50V	
C606	QCS21HJ-101Z	Ceramic 100P 50V	
C607	QCS21HJ-680Z	Ceramic 68P 50V	
C607	QCS21HJ-151	Ceramic 150P 50V	G
C608	QCS21HJ-680Z	Ceramic 68P 50V	
C608	QCS21HJ-151	Ceramic 150P 50V	G
C609	QCS21HJ-220Z	Ceramic 22P 50V	
C610	QCS21HJ-220Z	Ceramic 22P 50V	
C611	QCS21HJ-180Z	Ceramic 18P 50V	
C612	QCS21HJ-180Z	Ceramic 18P 50V	
C613	QCF21HP-103	Ceramic 0.01 μ 50V	
C614	QCF21HP-103	Ceramic 0.01 μ 50V	
C615	QET1JM-476	Electro 47 μ 63V	
C616	QET1JM-476	Electro 47 μ 63V	
C617	QFN31HK-103Z	Mylar 0.01 μ 50V	
C618	QFN31HK-103Z	Mylar 0.01 μ 50V	
C619	QCS31HJ-390Z	Ceramic 39P 50V	
C620	QCS31HJ-390Z	Ceramic 39P 50V	
C621	QCS31HJ-390Z	Ceramic 39P 50V	
C622	QCS31HJ-390Z	Ceramic 39P 50V	
C623	QFN31HK-104Z	Mylar 0.1 μ 50V	
C624	QFN31HK-104Z	Mylar 0.1 μ 50V	
C625	QFN31HK-104Z	Mylar 0.1 μ 50V	
C626	QFN31HK-104Z	Mylar 0.1 μ 50V	
C627	QCS21HJ-680	Ceramic 68P 50V	
C627	QCS21HJ-151	Ceramic 150P 50V	G
C628	QCS21HJ-680	Ceramic 68P 50V	
C628	QCS21HJ-151	Ceramic 150P 50V	G
C651	QCS21HJ-101	Ceramic 100P 50V	
C652	QCS21HJ-101	Ceramic 100P 50V	
C701	QETC1AM-107Z	Electro 100 μ 10V	
C702	QETC1HM-226Z	Electro 22 μ 50V	
C703	QETC1HM-105Z	Electro 1 μ 50V	
C704	QETC1EM-226Z	Electro 22 μ 25V	
C751	QFN31HK-103Z	Mylar 0.01 μ 50V	G
C752	QFN31HK-103Z	Mylar 0.01 μ 50V	G
C753	QFN31HK-103Z	Mylar 0.01 μ 50V	G
C754	QFN31HK-103Z	Mylar 0.01 μ 50V	G
C801	EEW6304-109N	Electro 10000 μ 63V	
C802	EEW6304-109N	Electro 10000 μ 63V	
C803	QFZ0075-104H	M.Mylar 0.1 μ 400V	
C804	QCE22HP-103A	Ceramic 0.01 μ 500V	
C805	QETC1EM-107Z	Electro 100 μ 25V	
C806	QETC1EM-106Z	Electro 10 μ 25V	
C807	QCS31HJ-101Z	Ceramic 100P 50V	
C809	QET1CM-226Z	Electro 22 μ 16V	
C810	QETC1CM-226Z	Electro 22 μ 16V	
C815	QCE22HP-102	Ceramic 0.01 μ 500V	G

Coils

Item No.	Part Number	Description	□
L601	EQL0001-1R0	Inductor	
L602	EQL0001-1R0	Inductor	

Resistors

Item No.	Part Number	Description	□
R601	QRD141J-222S	Carbon 2.2K 1/4W	
R602	QRD141J-222S	Carbon 2.2K 1/4W	
R603	QRD141J-104S	Carbon 100K 1/4W	
R604	QRD141J-104S	Carbon 100K 1/4W	
R605	QRD141J-101S	Carbon 100 1/4W	
R606	QRD141J-101S	Carbon 100 1/4W	
R607	QRD141J-561S	Carbon 560 1/4W	
R608	QRD141J-561S	Carbon 560 1/4W	
R609	QRD145J-820S	UNF. Carbon 82 1/4W	
R610	QRD145J-820S	UNF. Carbon 82 1/4W	
R611	QRD145J-121S	UNF. Carbon 120 1/4W	
R612	QRD145J-121S	UNF. Carbon 120 1/4W	
R613	QRD141J-470S	Carbon 47 1/4W	
R614	QRD141J-470S	Carbon 47 1/4W	
R615	QRD012J-153A	O.M. Film 15K 1W	
R617	QRD141J-101S	Carbon 100 1/4W	
R618	QRD141J-101S	Carbon 100 1/4W	
R619	QRD145J-151S	UNF. Carbon 150 1/4W	
R620	QRD145J-151S	UNF. Carbon 150 1/4W	
R621	QRD141J-104S	Carbon 100K 1/4W	
R622	QRD141J-104S	Carbon 100K 1/4W	
R625	QRD141J-561S	Carbon 560 1/4W	
R626	QRD141J-561S	Carbon 560 1/4W	
R627	QRD145J-470S	UNF. Carbon 47 1/4W	
R628	QRD145J-470S	UNF. Carbon 47 1/4W	
R629	QRD141J-471S	Carbon 470 1/4W	
R630	QRD141J-471S	Carbon 470 1/4W	
R631	QRD141J-101S	Carbon 100 1/4W	
R632	QRD141J-101S	Carbon 100 1/4W	
R633	ERT-D2WFL351S	Thermister 350	
R634	ERT-D2WFL351S	Thermister 350	
R635	QVZ3501-471	Variable 470 1/8W	
R636	QVZ3501-471	Variable 470 1/8W	
R637	QRD141J-391S	Carbon 390 1/4W	
R638	QRD141J-391S	Carbon 390 1/4W	
R639	QRD145J-100S	UNF. Carbon 10 1/4W	
R640	QRD145J-100S	UNF. Carbon 10 1/4W	
R641	QRD145J-100S	UNF. Carbon 10 1/4W	
R642	QRD145J-100S	UNF. Carbon 10 1/4W	
R643	QRD145J-272S	UNF. Carbon 2.7K 1/4W	
R644	QRD145J-272S	UNF. Carbon 2.7K 1/4W	
R645	QRD145J-471S	UNF. Carbon 470 1/4W	
R646	QRD145J-471S	UNF. Carbon 470 1/4W	
R647	ERF032K-R22	Cement 0.22 3W	
R648	ERF032K-R22	Cement 0.22 3W	
R649	QRG012J-100A	O.M. Film 10 1W	
R650	QRG012J-100A	O.M. Film 10 1W	
R651	QRD125J-330	UNF. Carbon 33 1/2W	
R652	QRD125J-330	UNF. Carbon 33 1/2W	
R653	QRD141J-103S	Carbon 10K 1/4W	
R654	QRD141J-103S	Carbon 10K 1/4W	
R655	QRD141J-821S	Carbon 820 1/4W	
R656	QRD141J-821S	Carbon 820 1/4W	
R657	QRD141J-821S	Carbon 820 1/4W	
R658	QRD141J-821S	Carbon 820 1/4W	
R659	QRD141J-621S	Carbon 620 1/4W	
R660	QRD141J-621S	Carbon 620 1/4W	
R661	QRD141J-621S	Carbon 620 1/4W	
R662	QRD141J-621S	Carbon 620 1/4W	
R665	QRD141J-103S	Carbon 10K 1/4W	

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

Resistors

Item No.	Part Number	Description	□
R666	QRD141J-103S	Carbon 10K 1/4W	
R701	QRD141J-272S	Carbon 2.7K 1/4W	
R702	QRD141J-272S	Carbon 2.7K 1/4W	
R703	QRD141J-183S	Carbon 18K 1/4W	
R704	QRD141J-183S	Carbon 18K 1/4W	
R705	QRD141J-104S	Carbon 100K 1/4W	
R706	QRD141J-104S	Carbon 100K 1/4W	
R707	QRD141J-223S	Carbon 22K 1/4W	
R708	QRD141J-223S	Carbon 22K 1/4W	
R709	QRD141J-103S	Carbon 10K 1/4W	
R710	QRD141J-104S	Carbon 100K 1/4W	
R711	QRD141J-473S	Carbon 47K 1/4W	
R712	QRD141J-683S	Carbon 68K 1/4W	
R713	QRD141J-683S	Carbon 68K 1/4W	
R714	QRD141J-822S	Carbon 8.2K 1/4W	
R715 △	QRG022J-102A	O. M. Film 1K 2W	
R716	QRG141J-273S	Carbon 27K 1/4W	
R717	QRG141J-183S	Carbon 18K 1/4W	
R718	QRD141J-224S	Carbon 220K 1/4W	
R719 △	QRD145J-470S	UNF Carbon 47 1/4W	
R720	QRD141J-332S	Carbon 3.3K 1/4W	
R721	QRD141J-682S	Carbon 6.8K 1/4W	
R722	QRD141J-472S	Carbon 4.7K 1/4W	
R751 △	QRG012J-331A	O. M. Film 330 1W	
R752 △	QRG012J-331A	O. M. Film 330 1W	
R753 △	QRD145J-100S	UNF Carbon 10 1/4W	G
R754 △	QRD145J-100S	UNF Carbon 10 1/4W	G
R755 △	QRD145J-100S	UNF Carbon 10 1/4W	G
R756 △	QRD145J-100S	UNF Carbon 10 1/4W	G
R801 △	QRD145J-150S	UNF Carbon 15 1/4W	
R803 △	QRD145J-220S	UNF Carbon 22 1/4W	
R804 △	QRD145J-220S	UNF Carbon 22 1/4W	
R805	QRD141J-153S	Carbon 15K 1/4W	
R806	QRD141J-391S	Carbon 390 1/4W	
R807	QRD141J-223S	Carbon 22K 1/4W	
R808	QRD141J-203S	Carbon 20K 1/4W	

Others

Item No.	Part Number	Part Name	Description	□
J601	E04365-003	Flat Wire Socket	Main In	
J751	E03572-007EM	Speaker Terminal		
J752	E03572-007EM	Speaker Terminal		
J753	QMS6302-125	Headphone Jack	(Silver)	
J753	QMS6302-128	Headphone Jack	(Black)	
S601	QST4241-E06	Push Switch	Speaker	
S602	QST4241-E06	Push Switch	Speaker	
P801	QMV5005-003	3P Plug Ass'y	EQ	
P802	QMV5005-003	3P Plug Ass'y	SEA	
P803	QMV5005-007	7P Plug Ass'y	FL	
RY701	ESK5D24-215	Relay		
RT801	E67764-103	R. Terminal		
RT802	E67764-103	R. Terminal		
	E70859-001	Earth Plate		
	E70945-H40B	Heatsink	(for Q801,	G
			Q802)	
	E10963-001	Circuit Board		

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

3-(2) ENE-010 ☐ Switch P. C. Board Ass'y

Note: ENE-010 ☐ varies according to the areas employed. See note (1) when replacing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada	ENE-010 A
Europe, Australia, U. S. Military Market U. K., Other Countries	ENE-010 B
West Germany	ENE-010 C

Note (2)

The symbols (赤、黒、白…………etc.) on P.C. Board surface are factory process only.

Note (3)

The Marks for Designated Area

J..... U. S. A. P, PG.. U. S. Military Market
C..... Canada BS..... U. K.
E..... Europe A..... Australia
G..... West Germany U..... Other Countries
No mark indicates all areas.

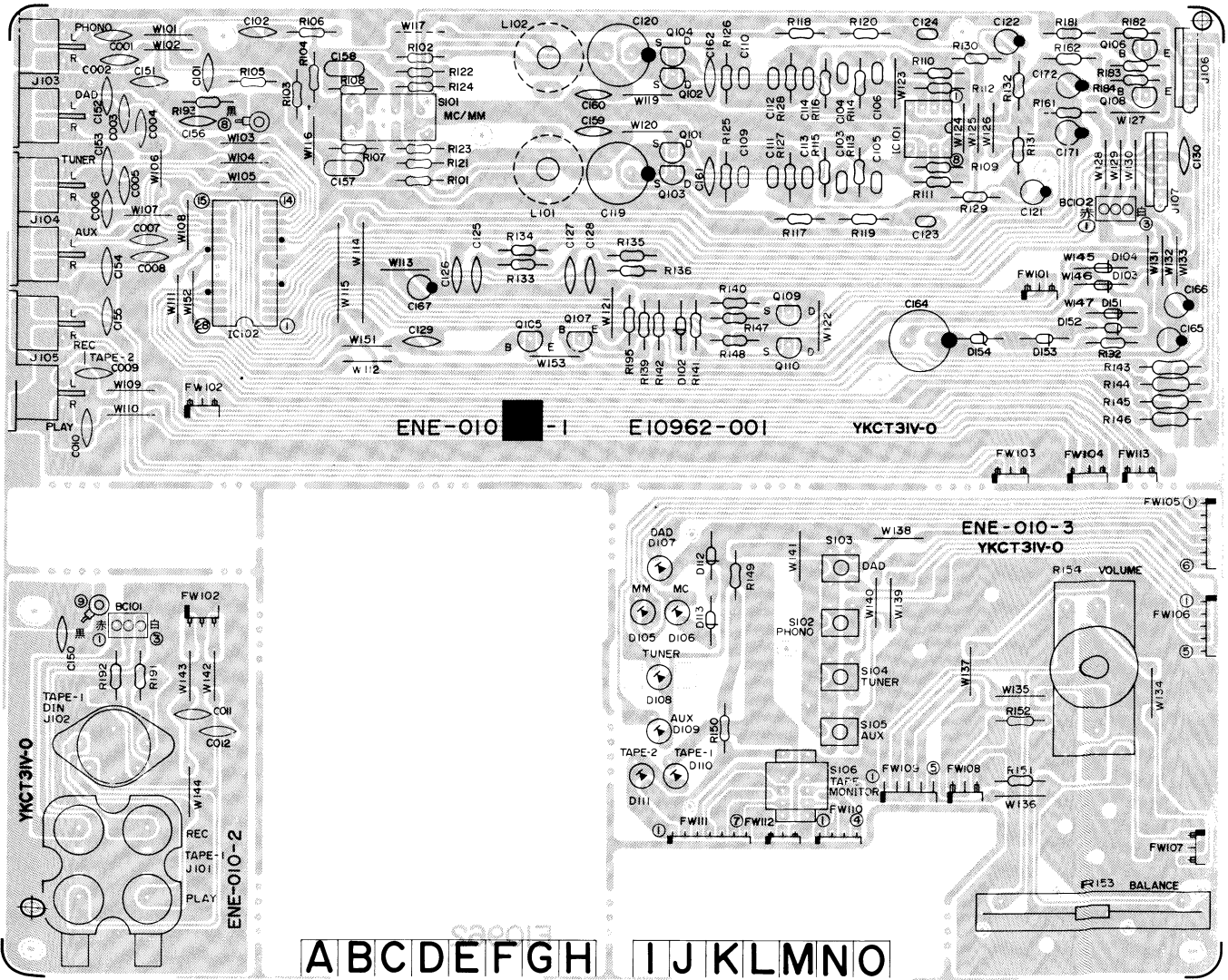


Fig. 4

Each Individual P.C. Board Location

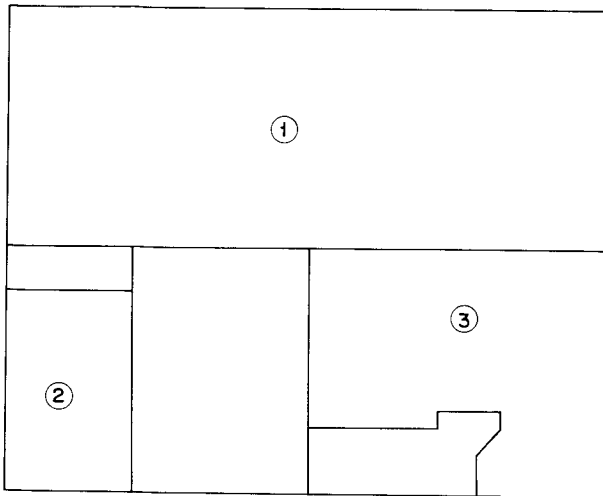


Fig. 5

- ① EQ Amp and Analog Switch P. C. Board Ass'y
 ② Tape 1 Input P. C. Board Ass'y
 ③ Source Switch and Volume P. C. Board Ass'y

Transistors

Item No.	Part Number	Description		□
			Maker	
Q101	2SK170 (BL)	F.E.T.	Toshiba	
Q102	2SK170 (BL)	F.E.T.	Toshiba	
Q103	2SK170 (BL)	F.E.T.	Toshiba	
Q104	2SK170 (BL)	F.E.T.	Toshiba	
Q105	DTA144N	Silicon	Rohm	
Q106	2SC1815 (Y, GR)	Silicon	Toshiba	
Q107	DTC144N	Silicon	Rohm	
Q108	2SA733A (P, Q)	Silicon	NEC	
Q109	2SK105 (H)	F.E.T.	NEC	
Q110	2SK105 (H)	F.E.T.	NEC	

ICs

Item No.	Part Number	Description		□
			Maker	
IC101	NJM560D-X		JRC	
IC102	LC7815H		Sanyo	

Diodes

Item No.	Part Number	Description		□
			Maker	
D102	1S2O76-31	Silicon	Hitachi	
D105	SLR-54MC50F165	LED	Rohm	
D106	SLR-54MC50F165	LED	Rohm	
D107	SLR-54MC50F165	LED	Rohm	
D108	SLR-54MC50F165	LED	Rohm	
D109	SLR-54MC50F165	LED	Rohm	
D110	SLR-54MC50F165	LED	Rohm	
D111	SLR-54MC50F165	LED	Rohm	
D112	1S2O76-31	Silicon	Hitachi	
D113	1S2O76-31	Silicon	Hitachi	

Capacitors

Item No.	Part Number	Description			□
C003	QCS21HJ-271	Ceramic	270P	50V	G
C004	QCS21HJ-271	Ceramic	270P	50V	G
C005	QCS21HJ-271	Ceramic	270P	50V	G
C006	QCS21HJ-271	Ceramic	270P	50V	G
C007	QCS21HJ-271	Ceramic	270P	50V	G
C008	QCS21HJ-271	Ceramic	270P	50V	G
C009	QCS21HJ-471	Ceramic	470P	50V	G
C010	QCS21HJ-471	Ceramic	470P	50V	G
C011	QCS21HJ-471	Ceramic	470P	50V	G
C012	QCS21HJ-471	Ceramic	470P	50V	G
C101	QCS31HF-151Z	Ceramic	150P	50V	
C102	QCS31HF-151Z	Ceramic	150P	50V	
C103	QFN31HK-822Z	Mylar	0.0082 μ	50V	
C104	QFN31HK-822Z	Mylar	0.0082 μ	50V	
C105	QFN31HK-392Z	Mylar	0.0039 μ	50V	
C106	QFN31HK-392Z	Mylar	0.0039 μ	50V	
C109	QFN31HJ-103	Mylar	0.01 μ	50V	
C110	QFN31HJ-103	Mylar	0.01 μ	50V	
C111	QFN31HJ-822Z	Mylar	0.0082 μ	50V	
C112	QFN31HJ-822Z	Mylar	0.0082 μ	50V	
C113	QFN31HJ-273Z	Mylar	0.027 μ	50V	
C114	QFN31HF-273Z	Mylar	0.027 μ	50V	
C119	QETBOJM-228	Electro	2200 μ	6.3V	
C120	QETBOJM-228	Electro	2200 μ	6.3V	
C121	QETC1HM-475Z	Electro	4.7 μ	50V	
C122	QETC1HM-475Z	Electro	4.7 μ	50V	
C123	QFN31HK-473Z	Mylar	0.047 μ	50V	
C124	QFN31HK-473Z	Mylar	0.047 μ	50V	
C125	QCS31HJ-101Z	Ceramic	100P	50V	
C126	QCS31HJ-101Z	Ceramic	100P	50V	
C127	QCS31HJ-101Z	Ceramic	100P	50V	
C128	QCS31HJ-101Z	Ceramic	100P	50V	
C150	QCF31HP-103Z	Ceramic	0.01 μ	50V	J, C, U, P, PG, E, A, BS
C151	QCF31HP-103Z	Ceramic	0.01 μ	50V	
C152	QCF31HP-103Z	Ceramic	0.01 μ	50V	

⚠ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

Capacitors

Item No.	Part Number	Description	□
C153	QCF31HP-103Z	Ceramic 0.01 μ 50V	J, C, U, P, PG, E, A, BS
C154	QCF31HP-103Z	Ceramic 0.01 μ 50V	
C155	QCF31HP-103Z	Ceramic 0.01 μ 50V	
C156	QCF31HP-473Z	Ceramic 0.047 μ 50V	
C157	QCN31HK-103Z	Mylar 0.01 μ 50V	G
C158	QFN31HK-103Z	Mylar 0.01 μ 50V	
C159	QCS31HJ-560Z	Ceramic 56P 50V	
C159	QCS21HJ-471	Ceramic 470P 50V	
C160	QCS31HJ-560Z	Ceramic 56P 50V	G
C160	QCS21HJ-471	Ceramic 470P 50V	
C161	QCS21HJ-390	Ceramic 39P 50V	
C161	QCS21HJ-680	Ceramic 68P 50V	
C162	QCS21HJ-471	Ceramic 470P 50V	G
C162	QCS21HJ-680	Ceramic 68P 50V	
C167	QETC1HM-475Z	Electro 4.7 μ 50V	
C171	QFN21HK-333	Mylar 0.033 μ 50V	
C172	QFN21HK-333	Mylar 0.033 μ 50V	

Coils

Item No.	Part Number	Description	□
L101	EQL0111-151	Inductor 150 μ H	G
L102	EQL0111-151	Inductor 150 μ H	G

Resistors

Item No.	Part Number	Description	□
R101	QRD148J-5R6S	Carbon 5.6 1/4W	G
R101	QRD141J-102S	Carbon 1K 1/4W	
R102	QRD148J-5R6S	Carbon 5.6 1/4W	
R102	QRD141J-102S	Carbon 1K 1/4W	
R103	QRD141J-473S	Carbon 47K 1/4W	G
R104	QRD141J-473S	Carbon 47K 1/4W	
R105	QRD141J-471S	Carbon 470 1/4W	
R106	QRD141J-471S	Carbon 470 1/4W	
R107	QRD141J-101S	Carbon 100 1/4W	
R108	QRD141J-101S	Carbon 100 1/4W	
R109	QRD141J-562S	Carbon 5.6K 1/4W	
R110	QRD141J-562S	Carbon 5.6K 1/4W	
R111	QRD141J-562S	Carbon 5.6K 1/4W	
R112	QRD141J-562S	Carbon 5.6K 1/4W	
R113	QRD141J-270S	Carbon 27 1/4W	
R114	QRD141J-270S	Carbon 27 1/4W	
R115	QRD141J-561S	Carbon 560 1/4W	
R116	QRD141J-561S	Carbon 560 1/4W	
R117	QRD141J-272S	Carbon 2.7K 1/4W	
R118	QRD141J-272S	Carbon 2.7K 1/4W	
R119	QRD141J-222S	Carbon 2.2K 1/4W	
R120	QRD141J-222S	Carbon 2.2K 1/4W	
R121	QRD141J-161S	Carbon 160 1/4W	
R122	QRD141J-161S	Carbon 160 1/4W	
R123	QRD148J-130S	Carbon 13 1/4W	
R124	QRD148J-130S	Carbon 13 1/4W	
R125	QRD141J-752S	Carbon 7.5K 1/4W	
R126	QRD141J-752S	Carbon 7.5K 1/4W	
R127	QRD141J-913S	Carbon 91K 1/4W	
R128	QRD141J-913S	Carbon 91K 1/4W	

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

Item No.	Part Number	Description	□
R129	QRD141J-331S	Carbon 330 1/4W	
R130	QRD141J-331S	Carbon 330 1/4W	
R131	QRD141J-104S	Carbon 100K 1/4W	
R132	QRD141J-104S	Carbon 100K 1/4W	
R133	QRD141J-103S	Carbon 10K 1/4W	
R134	QRD141J-103S	Carbon 10K 1/4W	
R135	QRD141J-103S	Carbon 10K 1/4W	
R136	QRD141J-103S	Carbon 10K 1/4W	
R139	QRD141J-103S	Carbon 10K 1/4W	
R140	QRD141J-103S	Carbon 10K 1/4W	
R141	QRD141J-103S	Carbon 10K 1/4W	
R142	QRD141J-823S	Carbon 82K 1/4W	
R143	QRD125J-471	UNF. Carbon 470 1/2W	
R144	QRD125J-471	UNF. Carbon 470 1/2W	
R145	QRD125J-471	UNF. Carbon 470 1/2W	
R146	QRD125J-471	UNF. Carbon 470 1/2W	
R147	QRD141J-102S	Carbon 1K 1/4W	
R148	QRD141J-102S	Carbon 1K 1/4W	
R149	QRD141J-271S	Carbon 270 1/4W	
R150	QRD141J-221S	Carbon 270 1/4W	
R151	QRD141J-472S	Carbon 4.7K 1/4W	
R152	QRD141J-472S	Carbon 4.7K 1/4W	
R153	QVZ5205-001	Variable 250K (W)	
R154	QVN9A3B-5F5	Variable 250K (B)	
R161	△ QRZ0062-390	Fusible 39 1/4W	
R162	△ QRZ0062-390	Fusible 39 1/4W	
R181	QRD141J-104S	Carbon 100K 1/4W	
R182	QRD141J-104S	Carbon 100K 1/4W	
R183	QRD141J-103S	Carbon 10K 1/4W	
R184	QRD141J-103S	Carbon 10K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	U P PG E A
R191	QRD141J-104S	Carbon 100K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	BS G U P PG
R191	QRD141J-104S	Carbon 100K 1/4W	
R191	QRD141J-104S	Carbon 100K 1/4W	
R192	QRD141J-104S	Carbon 100K 1/4W	
R192	QRD141J-104S	Carbon 100K 1/4W	
R192	QRD141J-104S	Carbon 100K 1/4W	E A BS G
R192	QRD141J-104S	Carbon 100K 1/4W	
R192	QRD141J-104S	Carbon 100K 1/4W	
R192	QRD141J-104S	Carbon 100K 1/4W	
R193	QRD148J-4R7S	Carbon 4.7 1/4W	
R195	QRD141J-104S	Carbon 100K 1/4W	

Others

Item No.	Part Number	Part Name	□
J101	EMN00TP-403A	4P Pin Jack	U P PG E
J102	E03623-003	DIN Socket	
J102	E03623-003	DIN Socket	
J102	E03623-003	DIN Socket	
J102	E03623-003	DIN Socket	
J102	E03623-003	DIN Socket	A BS G
J102	E03623-003	DIN Socket	
J102	E03623-003	DIN Socket	
J103	EMN00TV-402A	4P Pin Jack	
J104	EMN00TV-402A	4P Pin Jack	

Others

Item No.	Part Number	Part Name	<input type="checkbox"/>
J105	EMN00TV-402A	4P Pin Jack	
J106	E04365-006	6P Connector (for LED)	
J107	E04365-005	F.W. Socket (for Tact SW)	
S101	QSS4201-504	Push SW	
S102	ESP0001-007	Push SW (for Tact SW)	
S103	ESP0001-007	Push SW (for Tact SW)	
S104	ESP0001-007	Push SW (for Tact SW)	
S105	ESP0001-007	Push SW (for Tact SW)	
S106	QST0101-E01	Push SW (for Tape Moni)	
BC101	EWS203-006	SKT Wire (for REC1)	
BC102	EWS203-007	SKT Wire (for P. Supply)	
FW101	EWR23C-13JN	Flat Wire Assy (for Source Out)	
FW102	EWR23C-20NN	F. Wire Assy (for TAPE 1 PLAY)	
FW103	EWR23C-20JN	Flat Wire (for TAPE 2 REC)	
FW104	EWR23C-20JN	Flat Wire Assy (for TAPE 1, 2 PL)	
FW105	FWR36B-10JS	Flat Wire (for LED)	
FW106	EWR35B-10JS	Flat Wire Assy (for Tact SW)	
FW107	EWR23C-16JN	Flat Wire Assy (for Source Out)	
FW108	EWR23C-10JN	Flat Wire Assy (for Master Vol)	
FW109	EWR35B-10JS	Flat Wire Assy (for Loudness)	
FW110	EWR34B-10JS	Flat Wire Assy (for TAPE Moni)	
FW111	EWR37C-10JS	Flat Wire (for TAPE LED)	
FW112	EWR23C-10JN	Flat Wire Assy (for TAPE Source)	
FW113	EWR23C-20JN	Flat Wire Assy (for TAPE 1, 2 PL)	
	E10962-001	Circuit Board	
	E03532-001	Shield Case	G
	EWTO31-009	Ter. Wire Assy	

⚠ : Safety Parts

The column marked with ☐ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

3-(3) ENC-007 Tape Switch P. C. Board Ass'y

Note (1) The symbols (赤、黒、白………… etc.) on P.C. Board surface are factory process only.

Note (2) The column marked with □ indicates the area.

No mark indicates all areas.

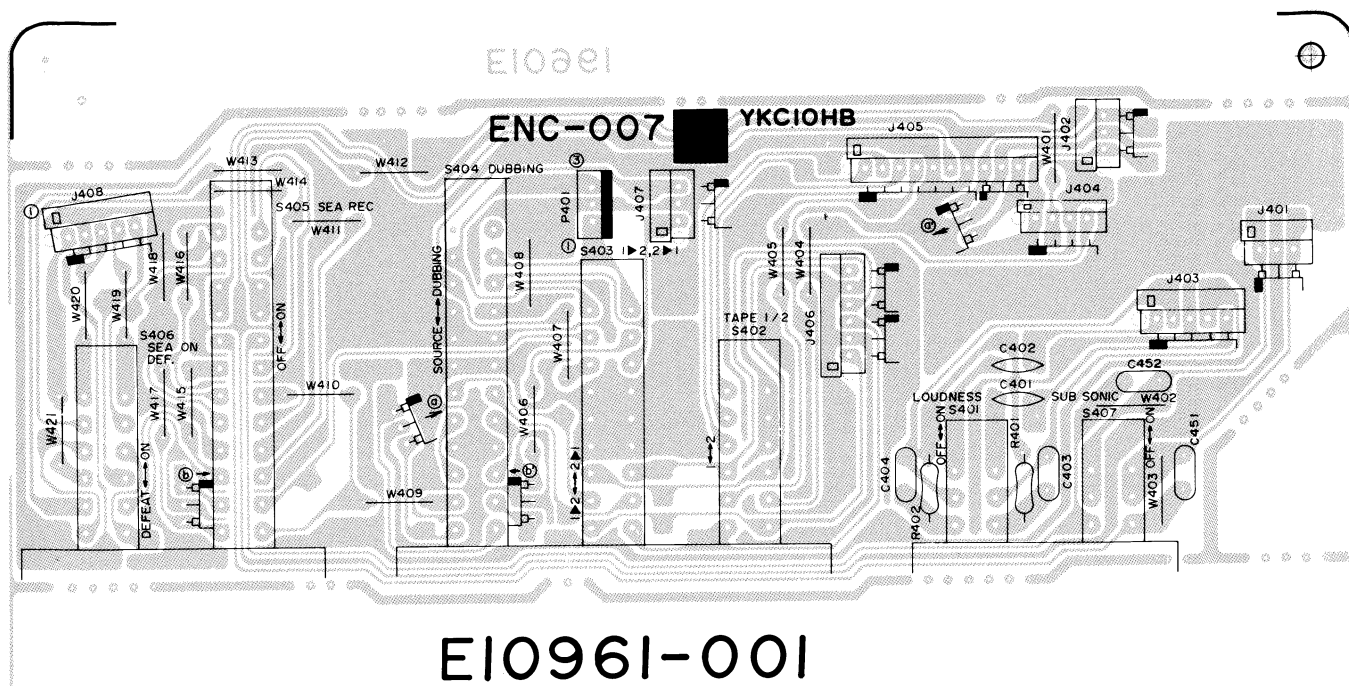


Fig. 6

Capacitors

Item No.	Part Number	Description	□
C401	QCS31HJ-181Z	Ceramic 180P 50V	
C402	QCS31HJ-181Z	Ceramic 180P 50V	
C403	QFN31HK-333Z	Mylar 0.033μ 50V	
C404	QFN31HK-333Z	Mylar 0.033μ 50V	

Resistors

Item No.	Part Number	Description	□
R401	QRD141J-223S	Carbon 22K 1/4W	
R402	QRD141J-223S	Carbon 22K 1/4W	

Others

Item No.	Part Number	Part Name	□
	E10961-001	Circuit Board	
	EWR23C-13NN	Flat Wire Assy	
	EWR23C-16NN	Flat Wire Assy	
	QXY123-010	Bus Wire	
S401	QST4101-E12	Push SW (for Loud. SW)	
S402	QST4361-E04	Push SW (for TAPE SW)	
S403	QST4361-E04	Push SW (for TAPE SW)	
S404	QST4361-E04	Push SW (for TAPE SW)	
S405	QST4261-E04	Push SW (for SEA SW)	
S406	QST4261-E04	Push SW (for SEA SW)	
P401	QMV5005-003	3P Plug Assy	
J401	E04365-003	F.W. Socket	
J402	E04365-003	F.W. Socket	
J403	E04365-005	F.W. Socket	
J404	E04365-004	4P Socket Assy	
J405	E04365-010	F.W. Socket	
J406	E04365-006	F.W. Socket	
J407	E04365-003	F.W. Socket	
J408	E04365-005	F.W. Socket	

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

3-(4) ENF-003 S.E.A. P. C. Board Ass'y

Note (1) The symbols (赤、黒、白………… etc.) on P.C. Board surface are factory process only.

Note (2) The column marked with □ indicates the area.
No mark indicates all areas.

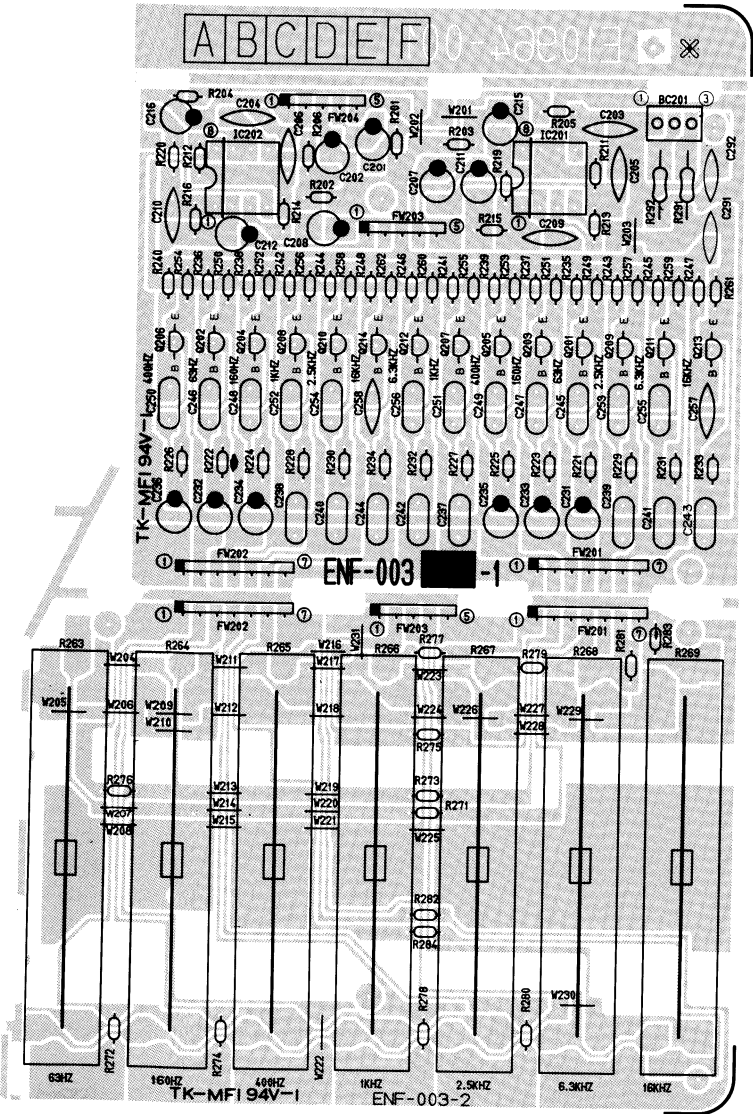


Fig. 7

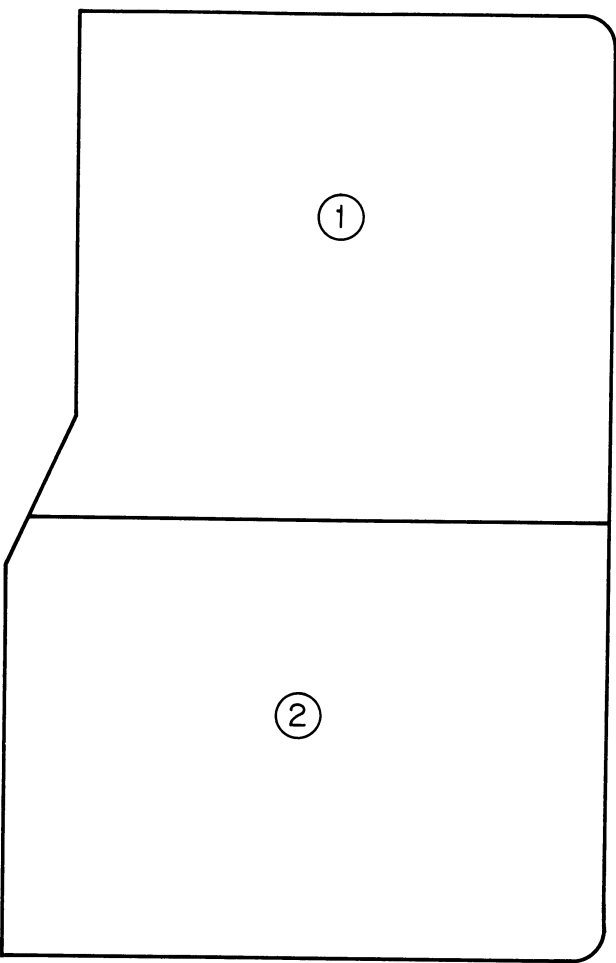


Fig. 8

- ① Semi Conductor Inductor P. C. Board Ass'y
- ② SEA Volume P. C. Board Ass'y

Transistors

Item No.	Part Number	Description	□
		Maker	
Q201	2SC2240 (GR)	Silicon	Toshiba
Q202	2SC2240 (GR)	Silicon	Toshiba
Q203	2SC2240 (GR)	Silicon	Toshiba
Q204	2SC2240 (GR)	Silicon	Toshiba
Q205	2SC2240 (GR)	Silicon	Toshiba
Q206	2SC2240 (GR)	Silicon	Toshiba
Q207	2SC2240 (GR)	Silicon	Toshiba
Q208	2SC2240 (GR)	Silicon	Toshiba
Q209	2SC2240 (GR)	Silicon	Toshiba
Q210	2SC2240 (GR)	Silicon	Toshiba
Q211	2SC2240 (GR)	Silicon	Toshiba
Q212	2SC2240 (GR)	Silicon	Toshiba
Q213	2SC2240 (GR)	Silicon	Toshiba
Q214	2SC2240 (GR)	Silicon	Toshiba

△ : Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

ICs

Item No.	Part Number	Description	□
		Maker	
IC201	NJM4560D-X	JRC	
IC202	NJM4560D-X	JRC	

Capacitors

Item No.	Part Number	Description	□
C201	QETC1HM-475Z	Electro 4.7μ 50V	
C202	QETC1HM-475Z	Electro 4.7μ 50V	
C203	QCS31HJ-471Z	Ceramic 470P 50V	
C204	QCS31HJ-471Z	Ceramic 470P 50V	
C205	QCS31HJ-101Z	Ceramic 100P 50V	
C206	QCS31HJ-101Z	Ceramic 100P 50V	
C207	QETC1CM-476Z	Electro 47μ 16V	

Capacitors

Item No.	Part Number	Description	□
C208	QETC1CM-476Z	Electro 47 μ 16V	
C209	QCS31HJ-101Z	Ceramic 100P 50V	
C210	QCS31HJ-101Z	Ceramic 100P 50V	
C211	QETC1CM-476Z	Electro 47 μ 16V	
C212	QETC1CM-476Z	Electro 47 μ 16V	
C215	QETC1HM-475Z	Electro 4.7 μ 50V	
C216	QETC1HM-475Z	Electro 4.7 μ 50V	
C231	QEB61EM-335Z	L.L.C.E. 3.3 μ 25V	
C232	QEB61EM-335Z	L.L.C.E. 3.3 μ 25V	
C233	QETC1HM-105Z	Electro 1 μ 50V	
C234	QETC1HM-474Z	Electro 1 μ 50V	
C235	QETC1HM-474Z	Electro 0.47 μ 50V	
C236	QETC1HM-474Z	Electro 0.47 μ 50V	
C237	QFN31HK-224Z	Mylar 0.22 μ 50V	
C238	QFN31HK-224Z	Mylar 0.22 μ 50V	
C239	QFN31HK-823Z	Mylar 0.082 μ 50V	
C240	QFN31HK-823Z	Mylar 0.082 μ 50V	
C241	QFN31HK-333Z	Mylar 0.033 μ 50V	
C242	QFN31HK-333Z	Mylar 0.033 μ 50V	
C243	QFN31HK-123Z	Mylar 0.012 μ 50V	
C244	QFN31HK-123Z	Mylar 0.012 μ 50V	
C245	QFN31HK-104Z	Mylar 0.1 μ 50V	
C246	QFN31HK-104Z	Mylar 0.1 μ 50V	
C247	QFN31HK-563Z	Mylar 0.056 μ 50V	
C248	QFN31HK-563Z	Mylar 0.56 μ 50V	
C249	QFN31HK-183Z	Mylar 0.018 μ 50V	
C250	QFN31HK-183Z	Mylar 0.018 μ 50V	
C251	QFN31HK-682Z	Mylar 6800P 50V	
C252	QFN31HK-682Z	Mylar 6800P 50V	
C253	QFN31HK-272Z	Mylar 2700P 50V	
C254	QFN31HK-272Z	Mylar 2700P 50V	
C255	QFN31HK-102Z	Mylar 1000P 50V	
C256	QFN31HK-102Z	Mylar 1000P 50V	
C257	QCS31HJ-471Z	Ceramic 470P 50V	
C258	QCS31HJ-471Z	Ceramic 470P 50V	
C291	QCF21HP-103	Ceramic 0.01 μ 50V	
C292	QCF21HP-103	Ceramic 0.01 μ 50V	

Resistors

Item No.	Part Number	Description	□
R201	QRD161J-104	Carbon 100K 1/6W	
R202	QRD161J-104	Carbon 100K 1/6W	
R203	QRD161J-104	Carbon 100K 1/6W	
R204	QRD161J-104	Carbon 100K 1/6W	
R205	QRD161J-102	Carbon 1K 1/6W	
R206	QRD161J-102	Carbon 1K 1/6W	
R211	QRD161J-272	Carbon 2.7K 1/6W	
R212	QRD161J-272	Carbon 2.7K 1/6W	
R213	QRD161J-101	Carbon 100 1/6W	
R214	QRD161J-101	Carbon 100 1/6W	
R215	QRD161J-272	Carbon 2.7K 1/6W	
R216	QRD161J-272	Carbon 2.7K 1/6W	
R219	QRD161J-331	Carbon 330 1/6W	
R220	QRD161J-331	Carbon 330 1/6W	
R221	QRD161J-471	Carbon 470 1/6W	
R222	QRD161J-471	Carbon 470 1/6W	
R223	QRD161J-471	Carbon 470 1/6W	
R224	QRD161J-471	Carbon 470 1/6W	

Item No.	Part Number	Description	□
R225	QRD161J-471	Carbon 470 1/6W	
R226	QRD161J-471	Carbon 470 1/6W	
R227	QRD161J-471	Carbon 470 1/6W	
R228	QRD161J-471	Carbon 470 1/6W	
R229	QRD161J-471	Carbon 470 1/6W	
R230	QRD161J-471	Carbon 470 1/6W	
R231	QRD161J-471	Carbon 470 1/6W	
R232	QRD161J-471	Carbon 470 1/6W	
R233	QRD161J-471	Carbon 470 1/6W	
R234	QRD161J-471	Carbon 470 1/6W	
R235	QRD161J-393	Carbon 39K 1/6W	
R236	QRD161J-393	Carbon 39K 1/6W	
R237	QRD161J-393	Carbon 39K 1/6W	
R238	QRD161J-393	Carbon 39K 1/6W	
R239	QRD161J-393	Carbon 39K 1/6W	
R240	QRD161J-393	Carbon 39K 1/6W	
R241	QRD161J-393	Carbon 39K 1/6W	
R242	QRD161J-393	Carbon 39K 1/6W	
R243	QRD161J-393	Carbon 39K 1/6W	
R244	QRD161J-393	Carbon 39K 1/6W	
R245	QRD161J-393	Carbon 39K 1/6W	
R246	QRD161J-393	Carbon 39K 1/6W	
R247	QRD161J-393	Carbon 39K 1/6W	
R248	QRD161J-393	Carbon 39K 1/6W	
R249	QRD161J-562	Carbon 5.6K 1/6W	
R250	QRD161J-562	Carbon 5.6K 1/6W	
R251	QRD161J-562	Carbon 5.6K 1/6W	
R252	QRD161J-562	Carbon 5.6K 1/6W	
R253	QRD161J-562	Carbon 5.6K 1/6W	
R254	QRD161J-562	Carbon 5.6K 1/6W	
R255	QRD161J-562	Carbon 5.6K 1/6W	
R256	QRD161J-562	Carbon 5.6K 1/6W	
R257	QRD161J-562	Carbon 5.6K 1/6W	
R258	QRD161J-562	Carbon 5.6K 1/6W	
R259	QRD161J-562	Carbon 5.6K 1/6W	
R260	QRD161J-562	Carbon 5.6K 1/6W	
R261	QRD161J-562	Carbon 5.6K 1/6W	
R262	QRD161J-562	Carbon 5.6K 1/6W	
R263	QVZ5010-106	S. Variable 1/6W	
R264	QVZ5010-106	S. Variable 1/6W	
R265	QVZ5010-106	S. Variable 1/6W	
R266	QVZ5010-106	S. Variable 1/6W	
R267	QVZ5010-106	S. Variable 1/6W	
R268	QVZ5010-106	S. Variable 1/6W	
R269	QVZ5010-106	S. Variable 1/6W	
R271	QRD161J-560	Carbon 56 1/6W	
R272	QRD161J-560	Carbon 56 1/6W	
R273	QRD161J-560	Carbon 56 1/6W	
R274	QRD161J-560	Carbon 56 1/6W	
R275	QRD161J-560	Carbon 56 1/6W	
R276	QRD161J-560	Carbon 56 1/6W	
R277	QRD161J-560	Carbon 56 1/6W	
R278	QRD161J-560	Carbon 56 1/6W	
R279	QRD161J-560	Carbon 56 1/6W	
R280	QRD161J-560	Carbon 56 1/6W	
R281	QRD161J-560	Carbon 56 1/6W	
R282	QRD161J-560	Carbon 56 1/6W	
R283	QRD161J-560	Carbon 56 1/6W	
R284	QRD161J-560	Carbon 56 1/6W	
R291	QRD145J-2R2S	UNF. Carbon 2.2 1/4W	
R292	QRD145J-2R2S	UNF. Carbon 2.2 1/4W	

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

Others

Item No.	Part Number	Part Name	<input type="checkbox"/>
FW201 FW202 FW203 FW204	E10964-001	Circuit Board	
	E300796-001	Fastener	
	EWR37B-08SS	Flat Wire Assy	
	EWR37B-08SS	Flat Wire Assy	
	EWR35B-13SS	Flat Wire Assy	
	EWR35B-10JS	Flat Wire Assy	

⚠ : Safety Parts

The column marked with ☐ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

3-(5) ENH-021 □ Fluorescent Lamp P. C. Board Ass'y

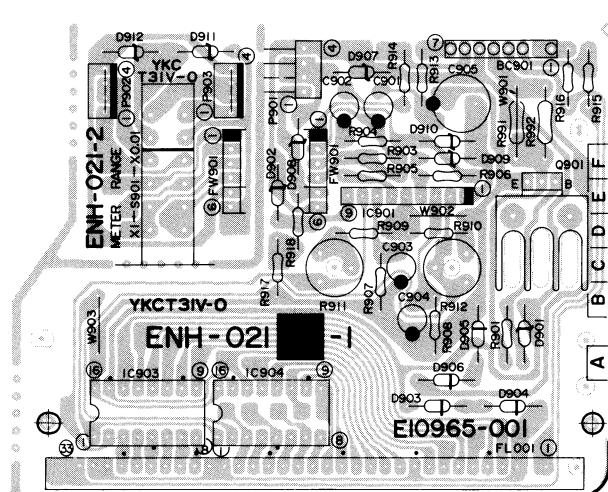
Note (1) The symbols (赤、黒、白……………etc.) on P.C. Board surface are factory process only.**Note (2)** The column marked with □ indicates the area.
No mark indicates all areas.

Fig. 9

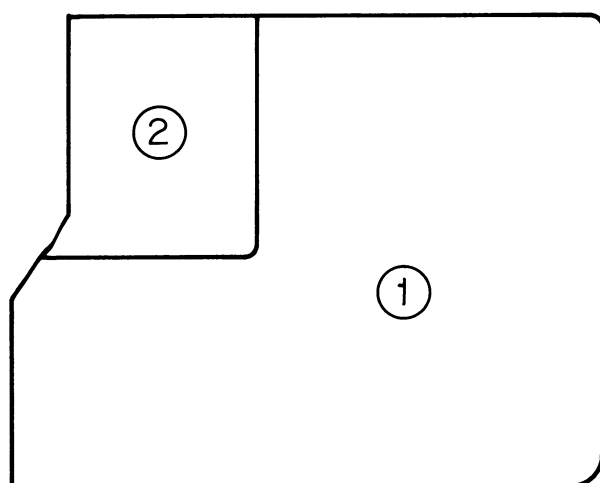


Fig. 10

- ① Fluorescent Lamp P.C. Board Ass'y
② Meter Range Switch P.C. Board Ass'y

Transistor

Item No.	Part Number	Description	□
Q901	2SB507V (E)	Silicon	

ICs

Item No.	Part Number	Description	□
IC901 IC903 IC904	TA7318P (1, 2) HA12010 HA12010	Toshiba Hitachi Hitachi	

Diodes

Item No.	Part Number	Description	□
D901 D902 D903 D904 D905	RD18EB3 RD2.7EB2 1S2076-31 1S2076-31 1S2076-31	Zener Zener Silicon Silicon Silicon	Maker NEC NEC Hitachi Hitachi Hitachi
D906 D907 D908 D909 D910	1S2076-31 RD8.2EB3 RD8.2EB3 RD4.7EB2 RD4.7EB2	Silicon Zener Zener Zener Zener	Hitachi NEC NEC NEC NEC

Capacitors

Item No.	Part Number	Description	□
C901	QETC1HM-105Z	Electro 1μ 50V	
C902	QETC1HM-105Z	Electro 1μ 50V	
C903	QETC1HM-105Z	Electro 1μ 50V	
C904	QETC1HM-105Z	Electro 1μ 50V	
C905	QETC1AM-477Z	Electro 470μ 10V	

Resistors

Item No.	Part Number	Description	□
R901	QRD141J-153S	Carbon 15K 1/4W	
R903	QRD141J-273S	Carbon 27K 1/4W	
R904	QRD141J-273S	Carbon 27K 1/4W	
R905	QRD141J-152S	Carbon 1.5K 1/4W	
R906	QRD141J-152S	Carbon 1.5K 1/4W	
R907	QRD141J-105S	Carbon 1M 1/4W	
R908	QRD141J-105S	Carbon 1M 1/4W	
R909	QRD141J-471S	Carbon 470 1/4W	
R910	QRD141J-471S	Carbon 470 1/4W	
R911	QVZ3501-102	Variable 1K 1/8W	
R912	QVZ3501-102	Variable 1K 1/8W	
R913	QRD141J-911S	Carbon 910 1/4W	
R914	QRD141J-911S	Carbon 910 1/4W	
R915	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	U
R915	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	P
R915	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	PG
R915	QRD145J-3R3S	Carbon 3.3 1/4W	E
R915	QRD145J-3R3S	Carbon 3.3 1/4W	G
R915	QRD145J-3R3S	Carbon 3.3 1/4W	A
R915	QRD145J-3R3S	Carbon 3.3 1/4W	BS
R916	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	U
R916	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	P
R916	QRD145J-5R6S	UNF. Carbon 5.6 1/4W	PG
R916	QRD145J-3R3S	UNF. Carbon 3.3 1/4W	E
R916	QRD145J-3R3S	UNF. Carbon 3.3 1/4W	G
R916	QRD145J-3R3S	UNF. Carbon 3.3 1/4W	A
R916	QRD145J-3R3S	UNF. Carbon 3.3 1/4W	BS
R917	QRZ0062-330	Fusible 33 1/4W	
R918	QRD141J-100	Carbon 10 1/4W	

△ : Safety Parts

The column marked with □ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

Others

Item No.	Part Number	Part Name	<input type="checkbox"/>
S901	E10965-001	Circuit Board	
	E69826-H40B	Heatsink	
	E67910-001	Spacer (for D907, D908)	
	SBSB3008Z	T. Screw	
	QST2101-E08	Push SW (for Lamp)	
FW901	EWR34B-13SS	F. Wire Assy	
P901	QMV5004-004	4P Plug Assy	
BC901	EWS208-003	Socket Wire Assy	
FL101	ELU0001-010	F.L.	

⚠ : Safety Parts

The column marked with ☐ indicates the area.

Parts without character in the column are used commonly regardless of delivery area.

3-(6) TPS-317 □ Fuse P. C. Board Ass'y

■ for Europe, West Germany, Australia and U.K.

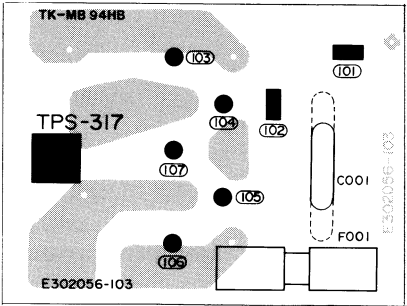


Fig. 11

Capacitors

Item No.	Part Number	Description	□
C001	△ QFZ9020-103	M. Mylar	
C001	△ QFZ9020-103BS	M. Mylar	BS

Others

Item No.	Part Number	Description	□
	E302056-103	Circuit Board	
	E302056-103BS	Circuit Board	BS
	E43727-002	Tab	
	E65508-001	Tab	
	EMG7331-001	Fuse Clip	

△ : Safety Parts
The column marked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

■ for Other Countries

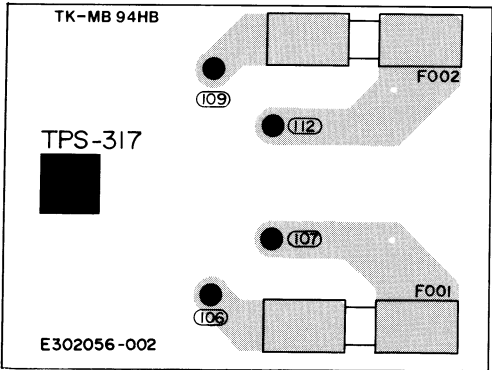


Fig. 12

Others

Item No.	Part Number	Description	□
	E302056-002	Circuit Board	
	E43727-002	Tab	
	E65508-001	Tab	
	EMG7331-001	Fuse Clip	

△ : Safety Parts

3-(7) TPS-255 □ AC Outlet P. C. Board Ass'y

■ for U. S. A. & Canada

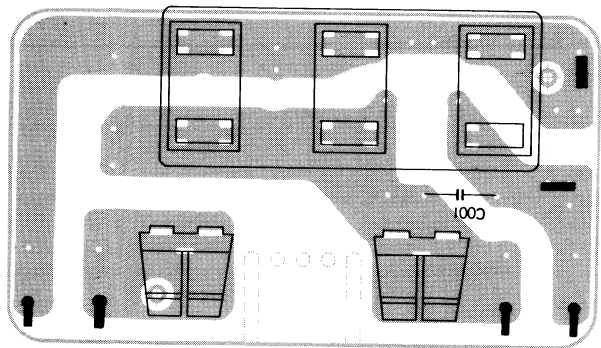


Fig. 13

Capacitor

Item No.	Part Number	Description	□
C001 ⚠	QCZ9014-103A	Ceramic	

Others

Item No.	Part Number	Description	□
	E66003-005	Circuit Board	
	E03675-004	Fuse Clip	
	E43727-001	Tab	
	E65508-001	Tab	
⚠	QMC0637-004	3P AC Socket	

⚠ : Safety Parts

3-(8) TPS-318 □ Voltage Selector P. C. Board Ass'y

■ for Other Countries

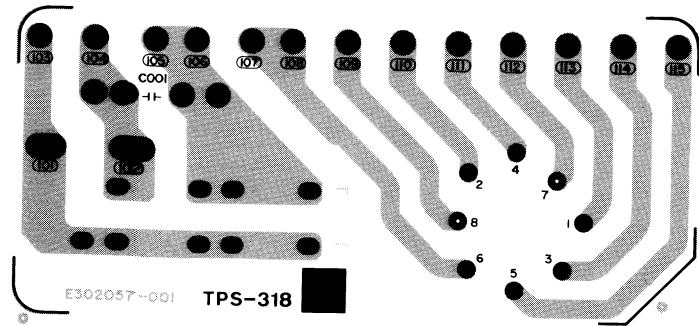


Fig. 14

Capacitor

Item No.	Part Number	Description	□
C001 ⚠	QFH53BM-103M	M. Mylar 0.01	

Others

Item No.	Part Number	Part Name	□
	E302057-001	Circuit Board	
	E43727-001	Tab	
	E65508-001	Tab	
⚠	QMC0637-004	3P AC Outlet	
⚠	QSR0085-006U	Voltage Selector	

⚠ : Safety Parts

4. Packing Materials and Part Numbers

The Marks for Designated Area

J.....	U. S. A.	P, PG..	U. S. Military Market
C.....	Canada	BS.....	U. K.
E.....	Europe	A.....	Australia
G.....	West Germany	U.....	Other Countries

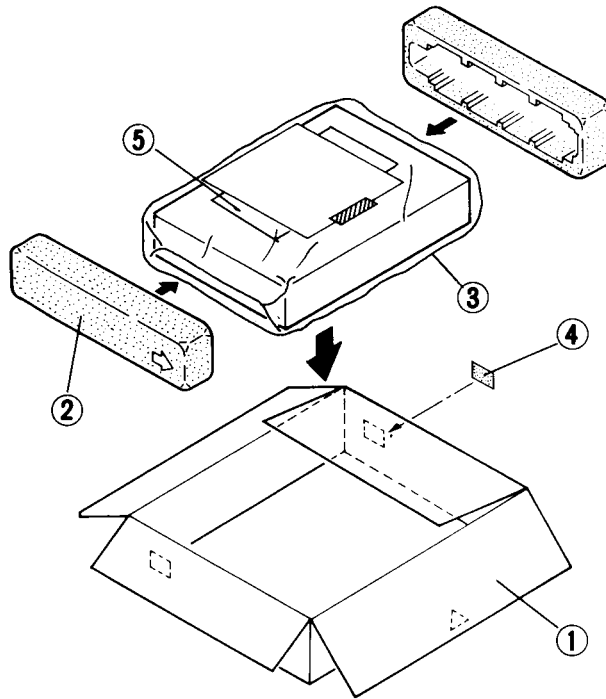


Fig. 15

No.	Part Number	Part Name	Q'ty	Description	Area
1	PK-AX400E	Packing Pad	1	(S), E300382-401	J, C, U, P, PG, E, G, A
	PK-AX400BE	Packing Pad	1	(B), E300382-409	
2	NZ-AX400E	Fillers	1	E24773-001 (R)	
				E24773-002 (L)	
3	E34033-017	Envelope	1		J, C, U, P, PG, E, G, A
4	E34033-017B	Envelope	1		BS
	E35246-001	Serial Label	2		J, C, U, P, PG, A, BS
	E35246-004	Serial Label	2		E
	E35246-006	Serial Label	2		G
5	E35497-001	110V Caution Sheet	1		P
	E35497-003	220V Caution Sheet	1		U, PG

⚠ : Safety Parts

Parts without character in the column are used commonly regardless of delivery area.

(S) and (B) in the Description column indicate silver and black versions.

5. Accessories List

Part Name	Part Number	Area
Siemens Plug	E04056	U
Warning Label	E60965-001BS	BS
Tie Band	E33754-001	BS
Instruction Book	E30580-1181A	J, C, U P, PG, E, G, A
Instruction Book	E30580-1181ABS	BS
Envelope (for Instruction Book)	E41202-2	J, C, U, P, PG, E, G, A
Envelope (for Instruction Book)	E41202-2B	BS
JVC Safety Instruction Sheet	BT20044D	J
Envelope (for Warranty Card)	E66416-003	J
Service Center List	BT20071	C
Warranty Card	BT20048A	J, PG
Warranty Card	BT20025F	C
Warranty Card	BT20064	G
Warranty Card	BT20029C	A
Warranty Card	BT20060	BS
JVC Service Information Card	BT20046B	J, P, PG
EEC Agency	BT20066	G, BS
FTZ. Information	BT20054-006A	G

The Marks for Designated Areas

J..... U. S. A.

C..... Canada

E..... Europe

G..... West Germany

A..... Australia

P, PG..... U. S. Military Market

BS..... U. K.

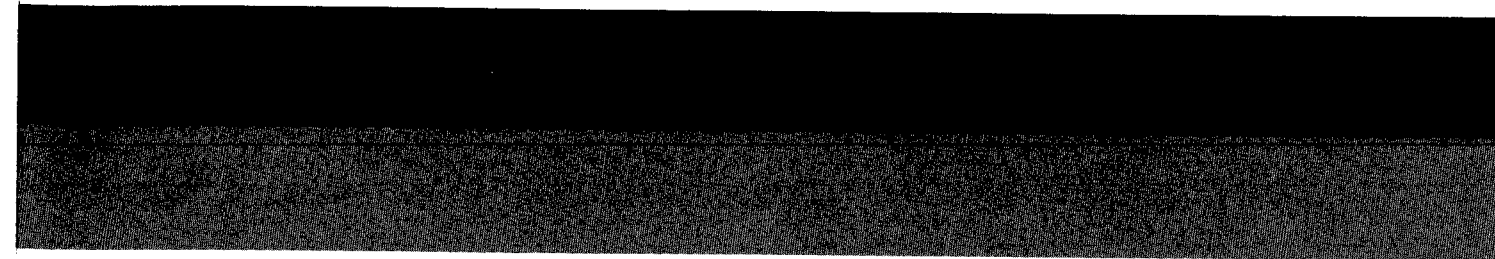
U..... Other Countries

MEMO

A-X400

A-X400

MEMO



JVC

VICTOR COMPANY OF JAPAN, LIMITED
STEREO DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN